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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,963	06/29/2001	Young Tae Yang	8733.441.00	6103
30827	7590	11/03/2006		
MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			EXAMINER NORRIS, JEREMY C	
			ART UNIT 2841	PAPER NUMBER

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/893,963

Applicant(s)

YANG ET AL.

Examiner

Jeremy C. Norris

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2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 August 2006 has been entered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-35 rejected under 35 U.S.C. 102(b) as being anticipated by US 5,777,275 (Mizutani).

Mizutani discloses, referring primarily to figures 1-3, a flexible circuit film for connecting external circuits (col. 3, lines 30-35), comprising: a body (1); a first pad (in area 1a; col. 3, lines 30-35) provided at one end of the body to be adhesively connected to a pad of a first printed circuit board, a second pad (in area 1b, col. 3, lines 30-35) provided at other end of the body to be engaged to a connector of a second printed circuit board and electrically connected to the first pad (col. 3, lines 30-35); and least one force absorbing edge recess (3c) defined in the body that absorbs a force

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transferred from the second pad (col. 3, lines 50-65) [claim 1] wherein the recess is defined in the body in a region adjacent to second pad [claim 2], wherein the recess is defined in at least two side surfaces (defined by slot 3b) of the body in the region adjacent to the second pad [claim 3], wherein the body has at least one bent portion (3) [claim 4], the body having at least two side surfaces wherein the at least one recess is defined at each of the at least two side surfaces in a region adjacent to the bent portion [claim 5], wherein a first recess (3c) is defined at the bent portion and said at least one recess is defined in the body in a region adjacent to the second pad [claim 6], wherein said at least one recess is defined at the bent portion [claim 7], wherein said at least one recess has a substantially concave shape [claim 8] wherein the at least one recess has a substantially curved shape [claim 9], wherein the body having at least two side surfaces wherein the at least one recess is defined at a region adjacent to the bent portion [claim 22], wherein the concave shape is greater than a semicircle [claim 23], wherein the concave shape has a shape of an incomplete circle [claim 24], wherein the one recess includes a cutout portion [claim 25].

Similarly, Mizutani discloses a flexible printed circuit film (1) for connecting external circuits (col. 3, lines 5-20), comprising, a body having a first portion (1a, 3) and a second portion (1b) the first portion intersecting the second portion to form a corner portion (near slot 3b), the corner portion having an inner vertex and an outer vertex; a first pad connected at an end of the first portion (col. 3, lines 30-35); a second pad connected at an end of the second portion and electrically connected to the first pad (col. 3, lines 25-35); and a first force absorbing recess (3c) in the body that absorbs a

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force transferred from the second pad (col. 3, lines 50-65) [claim 10], wherein the first recess has a substantially concave shape [claim 11], wherein the first recess has a substantially curved shape [claim 12], wherein the first portion is substantially perpendicular to the second portion [claim 13], wherein the first recess is at the inner vertex of the corner portion [claim 14], further comprising a second recess (3a) in a region of the second portion of the body, the region being between the outer vertex of the corner portion and the second pad [claim 15], wherein the second recess has a substantially concave shape [claim 16], wherein the second recess has a substantially curved shape [claim 17], wherein the first recess (3c) is at a region between the inner vertex and the second pad [claim 18], further comprising a second recess (3a) in a region between the outer vertex of the corner portion and the second pad [claim 19], wherein the second recess has a substantially concave shape [claim 20], wherein the second recess has a substantially curved shape [claim 21], wherein the first recess includes a cutout portion [claim 26], wherein the concave shape is greater than a semicircle [claims 27, 29, 31], wherein the concave shape has a shape of an incomplete circle [claims 28, 30, 32], wherein the second recess has a substantially curved shape [claim 33].

Additionally, Mizutani discloses, discloses, a printed circuit film for connecting external circuits comprising: a body (1) having a first portion (1a) and a second portion (1b); a first pad connected to the first portion (col. 3, lines 30-35); a second pad connected to the second portion and electrically connected to the first pad (col. 3, lines 30-35); and at least one recess portion (3c) in the body that absorbs a force transferred

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from the second pad (col. 3, lines 50-65) [claim 34], wherein the recess portion includes a cutout portion [claim 35].

### ***Response to Arguments***

Applicant's arguments filed 21 August 2006 have been fully considered but they are not persuasive. Applicant alleges, "in Mizutani the printed circuit board 1 is bent along the bending portion 3. It does not absorb a force transferred from the second pad". However, the Examiner has not relied on portion 3 for the teaching of "at least one force absorbing recess portion in the body that absorbs a force transferred from the second pad". Rather, it is the cutout feature 3c which Mizutani specifically states that the primary function of this cutout 3c is for strain (force) relief (col. 3, lines 55-65). Thus Applicant's traversal of the instant rejection on this ground is deemed unsuccessful.

Applicant's arguments with respect to claims 1-9 and 22-25 have been considered but are moot in view of the new ground(s) of rejection.

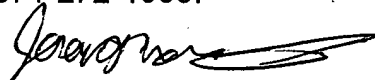
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy C. Norris whose telephone number is 571-272-1932. The examiner can normally be reached on Monday - Friday, 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-1984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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JCSN